Day 1: TUESDAY am		
10.00 - 11.00	**Conference Registration**	
11.00 - 11.15	**Welcome address – Vice-Chancellor Prof. Julia King, Aston University**	
11.15 – 11.50	**Keynote address: Euan Lindsay Program Leader - Mechatronic Engineering, Department of Mechanical Engineering, Curtin University of Technology, Perth**	
12.00 - 13.00 - Parallel 1 - First Year Students and Progression 1		
P5	The wheel has already been invented: facilitating students' use of existing mechanics resources	Thomas Goldfinch and Anne Gardner
P47	Progression of Engineering Students who attended a Pre-sessional Residential Summer School	Glynis Perkin, Sarah Bamforth and Carol Robinson
P105	A Validated Approach to Teaching Engineering Mathematics	Charles McCartan, Paul Hermon and Geoff Cunningham
12.00 - 13.00 - Parallel 2 - Learning Technologies 1		
P111	Improving Engagement and Learning Experience for Students using	Diane Rossiter, Stephen Beck, Martine Delbauve, Marian Hogg

	Lab-in-a-Box Concept	and Geoffrey Priestman
P99	Use of e-learning to encourage engagement and depth of understanding across engineering science and design within the first year of an engineering degree	Kay Bond, Carol Eastwick, John Prentice, Mike Johnson and Arthur Jones
P54	Online assessment is not always quick and easy	Elizabeth Smith
12.00 - 13.00 - Parallel 3 - Supporting Diversity		
P35	Engineering the curriculum	Bland Tomkinson
P104	Analysis of a diagnostic and support programme for improved learning of Civil Engineering students	Peter Mills and Panagiotis Georgakis
P77	Can a story deepen comprehension, engagement and analysis skills of undergraduate engineering strategy by students with diverse backgrounds?	Christopher J. M. Smith, Owen Richards, Nerea Etura Luque and Elizabeth Miles
13.00 – 14.00	**Lunch**	
Day 1: TUESDAY pm		
14.00 - 15.30 - Workshop 1		

W42	Bridge to Schools	Norman Seward, Gareth Williams and Keith Jones
14.00 - 15.30 - Workshop 2		
W20	The role of manual simulation/games in learning	Laurence Legg
14.00 - 15.30 - Workshop 3		
W82	Enquiry Based Learning, what's that then? How to inspire your students, develop their professional	Ivan Moore and Mike Bramhall
14.00 - 15.30	**Engineering Education Research SIG**	
15.30 – 16.00	**Afternoon Tea**	
16.00 - 17.30 - Parallel 4 - Enhancing the student learning experience		
P18	Non-traditional subjects taught to engineers: a case study of teaching anatomy	Tom Joyce
P62	Motivation of engineering students – considerations for programme design	Sarah Green and Erik Meyer

P48	Perceptions and their Influences on Approaches to Learning	Jenna Tudor and Roger Penlington
P43	Academic Success of First Year Engineering Students: Emotional Intelligence a Predictor?	Frankie Stewart and Colin Chisholm
16.00 - 17.30 - Parallel 5 - Learning Technologies 2		
P61	Improving the Learning Experience for the First Year Engineering Students using Technology Enabled Activity Led Learning	Jayaraman Ramachandran and Olivier Haas
P94	Laboratory focussed learning of core electronic engineering concepts in the first year of an honours degree programme	Kate Sugden, David Webb and Richard Reeves
P38	Flowchart driven Robot to promote Educational Development (FRED)	Anthony Bateson, Nathan Brown and Antony Wilkinson
P22	Problem Solving and Creativity in Engineering: conclusions of a three year project involving Reusable Learning Objects and Robots	Jonathan Adams, Stefan Kaczmarczyk, Phil Picton and Peter Demian
16.00 - 17.30 - Parallel 6 - Research Discussion Papers		
P78	Engaging and retaining distance learning engineering students: the development of effective engineering communities	Kath Clay

P124	Does pre-feedback self reflection improve student engagement, learning outcomes and tutor facilitation of group feedback sessions?	Anne Gardner and Keith Willey
P75	The Impact of a Large Cohort of Chinese Students on the Delivery of an Engineering Degree in the UK	Junxia Hou, Catherine Montgomery, Peter Harrington and Liz McDowell.
19.30	**Drinks Reception**	
20.15	**Conference Dinner – Aston University**	
Day 2: WEDNESDAY am		
7.30 - 8.30 am	**Conference Run**	
9.15 - 9.50	**Keynote Address – Richard Earp Education and Skills Manager, National Grid**	
10.00 - 11.00 - Parallel 1 - Design and Activity based learning		
P11	An activity led learning experience for first year electronic engineers	Nigel Poole, Robert Jinks, Stephen Bate, Mark Oliver and Christopher Bland
P96	Group Design-Build-Test Projects as the Core of an Integrated Curriculum in Product Design and Development	Paul Hermon, Charles McCartan and Geoff Cunningham

P117	The proof of the pudding is in the eating	John Swagten, Faas Moonen and Ivette Wennekes
10.00 - 11.00 - Parallel 2 - Project Based Learning		
P118	Internationalization of Undergraduate Group Projects	Martin Pitt
P109	Making projects work: a review of transferable best practice approaches to engineering project-based learning in the UK	Ruth Graham and Edward Crawley
P40	Service-learning experiences: a way forward in teaching engineering students?	Elena Rodriguez-Falcon and Alaster Yoxall
10.00 - 11.00 - Parallel 3 - Education for Sustainable Development		
P39	Approaches to the embedding of sustainability into the engineering curriculum – where are we now, and how do engineers become global?	Simon Steiner and Roger Penlington
P84	Developing awareness about sustainable development in Civil Engineering studies	Barbara Karleusa, Aleksandra Deluka-Tibljas, Suzana Ilic and Nevena Dragicevic
P64	An engineering design course: developments over five years emphasising hands-on learning and topics of sustainability	Tom Joyce, Iain Evans and Bill Pallan

11.00 – 11.30	**Coffee**	
11.30 - 13.00 - Parallel 4 - Meeting the needs of Industry		
P55	Meeting the needs of industry: the drivers for change in engineering education	Carol Arlett, Fiona Lamb, Richard Dales, Liz Willis and Emma Hurdle
P74	Major Hazards Management – a finishing module for undergraduate engineers on how to manage risk	Graham Schleyer, Nicholas Underwood, Graham Dalzell and Nicola Stacey
P19	The career aspirations of a cohort of Associate Degree students: Implications for the engineering educators and the profession	David Dowling
P13	Engineering your Workplace Advantage: Personal Development Planning resources for undergraduate engineers	Andrea Duncan
11.30 - 13.00 - Parallel 5 - Research Discussion Papers		
P101	A Quantitative Approach to Identifying Threshold Concepts in Engineering Education	Martin Holloway, Esat Alpay and Anthony Bull
P45	Towards developing a coherant notation in dynamics that will aid learners	Peter Vivian

P41	"How do we encourage the next generation of engineers?"	Susan Forder, Kieran McDonald, Gary Drabble and Jeremy Twyman
11.30 - 13.00 - Parallel 6 - The Engineering Subject Centre Teaching Award Finalists 2010		
13.00 – 14.00	**Lunch**	
Day 2: WEDNESDAY pm		
14.00 - 15.30 - Workshop 1		
W71	Getting girls into engineering and women onto engineering degree courses	Heather Hawthorne and Rachel Epson
14.00 - 15.30 - Workshop 2		
W69	A Global Dimension for Engineering Education	Petter Matthews and Caroline Baillie
14.00 - 15.30 - Workshop 3		
W33	Inspirational teaching and learning: Developing and encouraging autonomous student learning	Michael Bramhall, Keith Radley and Ivan Moore
14.00 -	**Network Meeting – NTFS and Teaching Awards Finalists**	

15.30		
15.30 – 16.00	**Afternoon Tea**	
16.00 - 17.30 - Parallel 7 - Work-Based Learning		
P36	Credit bearing work-based learning: learning from other's practice	Sarah Bamforth, Debra Lilley, Caroline Lowery and Adam Crawford
P70	Work-based MSc Professional Engineering: an evaluation so far	Deborah Seddon and Deborah Lock
P122	An effective practice in preparing students for workplace	Fakhteh Soltani-Tafreshi, David Twigg and John Dickens
P57	Development of a work-based learning MSc course which incorporates the development and demonstration of professional engineering competence standards	Bill Glew and Ted Elsworth
16.00 - 17.30 - Parallel 8 - Recruiting and Retaining Engineering Students		
P60	Discourses, identities and learning: implications for the training of student ambassadors in engineering	Clare Gartland, Heather Hawthorne and Claire McLoughlin
P97	Inspiring young people to engage in engineering education: The Aston University Engineering Academy	Alison Halstead, Mike Jerome and Anne Wheeler

	Birmingham	
P15	Engaging Future Engineers: Pedagogy, Policy & Practice	Robin Clark and Jane Andrews
P66	The effects of gender on the success of a cohort of engineering students	Lorelle Burton and David Dowling
16.00 - 17.30 - Parallel 9 - Assessment and Feedback 1		
P29	Designing an Ideal Assessment Scheme for Dual Mode Delivery	Vasantha Aravinthan
P26	Motivating students to learn through good and helpful coursework feedback	Shun Ha Sylvia Wong
P53	Developing a Departmental Strategy to Improve Student Feedback	Jane Horner
P52	Addressing the Learners' Needs for Specific and Constructive Feedback	Jenna Tudor and Noel Perera
19.00 - 23.30	**Gala Dinner, National Motorcycle Museum** 18.45 Coaches depart 19.15 Drinks Reception and museum tour 20.15 The Engineering Subject Centre Teaching Award Presentations, supported by the Engineering Council. 20.30 Dinner 22.30 Coaches depart for Aston	
Day 3: THURSDAY am		
09.15 -	**Keynote address by Jack Lohman Vice Provost and**	

09.50	**Professor, Georgia Institute of Technology, Atlanta, Georgia**	
10.00 - 11.00 - Parallel 1 - Engineering Education – Perspectives from Students		
P103	Reflections on an integrated team approach to the creation of new e-learning resources for first year engineering students	Holly Fox, David Whitley, Julian Tenney and Carol Eastwick
P125	A Student's Perspective on the Effectiveness of Personality and Learning Tools in Engineering Education	David Whitman and Dorothy Missingham
P127	Engineering Humour: A student's perspective on the effective use of humour in engineering education	Amelia Greig, Dorothy Missingham and Colin Kestell
10.00 - 11.00 - Parallel 2 - Learning Technologies 3		
P25	Promoting collaborative learning in engineering management education through the use of wikis	Fiona Saunders, Mark Jasper and Peter Whitton
P28	Impact of using Moodle as an educational management tool to enhance learning for on campus and external mode electrical students at USQ	Ronald Sharma
P81	How do we build sustainable e-learning tools to meet the needs of engineering educators?	Nicola Wilkinson, Adam Crawford and Fiona Lamb

10.00 - 11.00 - Parallel 3 - Developing and motivating students		
P128	Leadership in a technological environment	Gary Codner
P8	Supporting development of independent learning skills	John Anthony Rossiter and Linda Gray
P23	Understanding Motivation in Large Groups of Engineering and Computing Students	Roberto Ramirez Iniguez and Ursula Canton
11.00 – 11.30	**Coffee**	
11.30 - 13.00 - Parallel 4 - Assessment and Feedback 2		
P9	Using audio to support student learning	John Rossiter, Anne Nortcliffe and Andrew Middleton
P90	Challenges of developing engineering students' writing through peer assessment	Teresa McConlogue, Jens-Dominik Mueller and Julia Shelton
P31	Effectiveness of self-assessment quizzes as a learning tool	Vasantha Aravinthan and Thiru Aravinthan
11.30 - 13.00 - Parallel 5 - First Year Students and Progression 2		
P12	The impact of task value upon stress and workload levels of first	Euan Lindsay

	year engineering students	
P121	Six-week introductory programme of activity led learning to improve student engagement and retention	Paul Green
P46	Who leaves and who stays? Retention and attrition in Engineering Education	Elizabeth Godfrey, Tim Aubrey and Robin King
P14	Evaluation of initiatives related to engagement and retention of first year mechanical engineering students at two Russell Group Universities	Tom Joyce and Elena Rodriguez-Falcon
11.30 - 13.00 - Parallel 6 - Research Discussion Papers		
P34	Who chooses the "E" in STEM?	Darryl N. Williams and Michael A. Gottfriend
P7	Engineering – young people want to be informed	E. Ekevall, E. L. Hayward, G. Hayward, J. Magill, E. Spencer, G. MacBride, C. Bryce and B. Stimpson
P16	'Catching Them Young': Inspiring Future Engineers, An Exploratory Study	Robin Clark and Jane Andrews
11.30 - 13.00	**WebPA SIG**	
13.00 –	**Lunch**	

14.00		
Day 3: THURSDAY pm		
14.00 - 15.30 - Workshop 1		
W129	OERP Workshop; Methods & Processes	Alex Fenlon and Rob Pearce
14.00 - 15.30 - Workshop 2		
W17	Building Bridges for Future Sustainability? Breaching the research-teaching nexus in Engineering Education	Robin Clark and Jane Andrews
14.00 - 15.30 - Workshop 3		
W93	Climbing up the Slippery Slope - helping first year engineers to master the peaks and troughs of differentiation	Glynis Perkin and Jan Robertson

Keynotes

Dr Jack R. Lohmann, Ph.D., P.E, Vice Provost and Professor, Georgia Institute of Technology, Atlanta, Georgia

 The title of Dr Lohmann's keynote was "**Engineering Education Innovation: Advancing the Global Capacity for Engineering Education R&D"**. Dr Lohmann is vice provost for Faculty and Academic Development and professor of Industrial and Systems Engineering at the Georgia Institute of Technology. His principal responsibilities include faculty development and promotion, the initiation, development, and accreditation of Georgia Tech's academic programs, and serving as the president's liaison to the Commission on Colleges of the Southern Association of Colleges and Schools (COC/SACS) and the National Collegiate Athletic Association (NCAA). He also is a member of the Board of Trustees of the Commission on Colleges/SACS. Dr. Lohmann has held appointments at the University of Michigan, the University of Southern California, l'École Centrale Paris, and the National Science Foundation (NSF).

Dr. Lohmann earned his B.S.M.E. from Oklahoma State University and his M.S. and Ph.D. in Industrial Engineering and Engineering Management at Stanford University. Among the external sponsors of his research work are AT&T, Continental AG, Dessault Systemes, ExxonMobil, GM, Hewlett-Packard, IBM, Microsoft Research, Motorola, National Science Foundation, Procter & Gamble, Sloan Foundation, and the United Engineering Foundation. He is a recipient of the Presidential Young Investigator Award and the Director's Award for Excellence (National Science Foundation), the A.M. Wellington Award (Institute of Industrial Engineers), and the Global Engineering and Engineering Technology Educator Award and the John L. Imhoff Global Excellence Award (American Society for Engineering Education). Dr. Lohmann is editor of the *Journal of Engineering Education*, and a Fellow of the Institute of Industrial Engineers, the American Society of Engineering Education, and the European Society for Engineering Education.

Watch Dr Jack R. Lohmann's keynote speech

Dr Euan Lindsay, Program Leader - Mechatronic Engineering, Department of Mechanical Engineering, Curtin University of Technology, Perth

 Dr Euan Lindsay is a Senior Lecturer in Mechatronic Engineering at Curtin University, in Perth, Western Australia. His research interests include engineering education, telecontrol (particularly internet-based telecontrol), artificial neural networks, and rehabilitative technologies for people with sensing impairments. Dr Lindsay is a Mechatronic engineer, a discipline that integrates computers, electronics and physical hardware. Dr Lindsay's PhD

investigated whether remote and simulated access alternatives to the traditional in-person laboratory experience could provide the same learning outcomes for students.

Dr Lindsay's work in Remote and Virtual laboratory classes has shown that there are significant differences not only in students' learning outcomes but also in their perceptions of these outcomes, when they are exposed to the different access modes. These differences have powerful implications for the design of remote and virtual laboratory classes in the future, and also provide an opportunity to match alternative access modes to the intended learning outcomes that they enhance.

Dr Lindsay is the President of the Australasian Association for Engineering Education, and co-edits the Australasian Journal of Engineering Education. Dr Lindsay was the recipient of a 2007 Carrick Award for Australian University Teaching. In 2005 he was named as one of the 30 Most Inspirational Young Engineers in Australia. Dr Lindsay has recently been made a Fellow of the Higher Education Academy

Watch Dr Euan Lindsay's Keynote speech

Richard Earp, Education and Skills Manager, National Grid

Richard Earp is Education and Skills Manager at National Grid. National Grid owns and operates the main gas and electricity transmission systems that form the backbone of the UK's energy infrastructure.

Richard is a chartered engineer with 23 years experience in the electricity industry, including control centre operations, emergency planning, managing maintenance teams, maintenance planning and, most recently, business and workforce planning. He has led major changes in the company's new-entrant training programmes including setting up new schemes at Foundation Degree level. He is now responsible for all of National Grid's schools engagement programmes, including establishing new work experience offerings, supporting the Engineering Diploma, developing a site visit programme for schools and STEM ambassador support.